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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,466

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Claudio Lacagnina

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EXAMINER

JOHNSTONE, ADRIENNE C

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

10/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,466	<b>Applicant(s)</b> LACAGNINA ET AL.	
	<b>Examiner</b> Adrienne C. Johnstone	<b>Art Unit</b> 1791	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-17 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20041222</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of the species, claims 13-17 and 21-24 in the reply filed on July 7, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 18-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 7, 2008 (see paragraph 1 above).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have not defined the term "reinforcing edge" in the specification other than describing it as comprising lengthened reinforcing elements positioned inclined relative to the radial direction of the tire (specification p. 13 lines 2-5), therefore it is not clear what is encompassed by the term "reinforcing edge". One way to overcome this rejection would be to amend claim 24 such that in line 1 "a reinforcing edge," is changed to -- a reinforcing edge, the reinforcing edge comprising lengthened reinforcing elements positioned inclined relative to the radial direction of the tire, -- .

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13-15, 17, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Published PCT Application WO 99/34989 A1 (equivalent to Auxerre (6,463,975 B1)).

See Auxerre embodiments of Figures 2 and 3, col. 1 lines 10-62 and col. 5 line 58 - col. 8 line 9 (wire=metallic filament). As to claim 21, the claim does not yet require the carcass neutral profile to intersect the straight sectional area of the respective annular reinforcing cores (there are an infinite number of possible “fields” that enclose the respective annular reinforcing cores in the reference tire, many of them being large enough to also intersect the carcass neutral profile). As to claim 22, the exemplary radial height  $h_c$  is 34 mm so the radial height of the enclosed insert is clearly depicted within the broadly claimed range of 1 mm - 35 mm. As to claim 24, see paragraph 4 above: the instant claim language does not distinguish over the clearly depicted layer in the reference tire extending radially internally and axially externally of the bead.

7. Claims 13-15, 17, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Published PCT Application WO 99/64225 A1.

See the embodiment of Figures 8 and 10, p. 17 line 18 - p. 43 line 8: basic tire structure is the same as in Figure 1 including at least one carcass ply 3 extending between beads and anchored by respective annular anchoring inserts 19 (annular reinforcing cores), a belt structure 5, a tread band 8 with relief pattern 8a, and sidewalls 9; adjacent carcass strips enclose additional annular insert 23 and elastomeric stiffening member 20. As to claims 14 and 15, the annular inserts are formed by winding

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at least one preferably metallic continuous filament-like element in concentric turns (p. 24 lines 18-30, p. 25 lines 4-12, and p. 30 lines 1-17). As to claim 21, the claim does not yet require the carcass neutral profile to intersect the straight sectional area of the respective annular reinforcing cores (there are an infinite number of possible “fields” that enclose the respective annular reinforcing cores in the reference tire, many of them being large enough to also intersect the carcass neutral profile). As to claim 22, the exemplary radial height *h* in Figure 10 is 3.5 mm so the radial height of the additional annular insert is clearly depicted within the broadly claimed range of 1 mm - 35 mm (p. 34 line 32 - p. 39 line 15). As to claim 24, see paragraph 4 above: the instant claim language does not distinguish over the clearly depicted layer in the reference tire extending radially internally and axially externally of the bead.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Published PCT Application WO 99/64225 A1 in view of Japanese Patent Application 9-195189 A.

See paragraph 7 above: JP '189 teaches to use bead wire having a diameter of 0.8 mm and a tensile strength of  $2200 \text{ N/mm}^2$  -  $2800 \text{ N/mm}^2$  (resulting in breaking load of 1100 N - 1400 N for circular cross-section wire) in order to reduce tire weight (abstract); it would therefore have been obvious to one of ordinary skill in the art to provide the bead wire in the above tire as taught by JP '189 in order to reduce tire weight.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Published PCT Application WO 99/34989 A1 (equivalent to Auxerre (6,463,975 B1)) in view of Pfeiffer (4,166,492) and Japanese Patent Application 9-195189 A.

See paragraph 6 above: Pfeiffer teaches to provide such a bead wire by assembling a plurality of wires into a ply and then spirally winding the ply a plurality of turns in order to improve shape stability (col. 1 line 61 - col. 3 line 31) and JP '189 teaches to use bead wire having a diameter of 0.8 mm and a tensile strength of  $2200 \text{ N/mm}^2$  -  $2800 \text{ N/mm}^2$  (resulting in breaking load of 1400 N - 1800 N for square cross-section wire) in order to reduce tire weight (abstract); it would therefore have been obvious to one of ordinary skill in the art to provide the bead wire in the above tire in the configuration taught by Pfeiffer to improve shape stability and with the properties taught by JP '189 in order to reduce tire weight.

### ***Conclusion***

12. It is noted that applicants are not yet claiming that the portion of the carcass ply that encloses the at least one insert is located between axially outer and axially inner annular reinforcing cores (5 and 6 in the drawings).

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrienne C. Johnstone whose telephone number is (571) 272-1218. The examiner can normally be reached on Monday-Friday, 1:00PM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Adrienne C. Johnstone  
Primary Examiner  
Art Unit 1791

Adrienne Johnstone

/Adrienne C. Johnstone/

October 9, 2008